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February 13, 2001

The Honorable Richard Meserve
Chairman
U.S. Nuclear Regulatory Commission
One White Flint North Building
11555 Rockville Pike
Rockville, MD 20852

Dear Chairman Meserve,

We write to follow up our letter of December 18, 2000 and the response to that letter of January 5, 2001 from Atomic Energy Canada Ltd. (AECL), regarding its application (XSNM 03171) to export 10.05 kilograms of bomb-grade, highly enriched uranium (HEU) for production of medical radioisotopes in the National Research Universal reactor (NRU). The applicant argues that the new license should be approved without affecting its previously approved license (XSNM 03060) to export 90.4 kilograms of HEU in targets for production of such isotopes in its new Maple reactors.

We would like to underscore two points. First, we do not oppose issuance of the proposed license, which will enable continued production of vital medical isotopes at the NRU. Second, we are concerned that if the Commission issues the new license without modifying the terms of the previous license, it effectively will grant the applicant an extension of at least one year to meet its commitment to convert isotope production to use of targets of low-enriched uranium (LEU) unsuitable for weapons. As you know, conversion to LEU targets as soon as they can be developed is required by U.S. non-proliferation law (the Schumer Amendment) as a condition for an applicant to receive interim HEU exports for use as targets.

If the Commission approves the new license without modifying the existing license, it will permit the applicant to export from the United States more HEU than is necessary, which is contrary to the Commission's responsibility under U.S. law. The applicant acknowledges that start-up of the Maple reactors has been delayed by at least a year. Thus, the applicant cannot begin using HEU targets in the Maple reactors until at least a year later than it had indicated at the time the Commission approved XSNM 03060. The applicant has given no indication that it plans to increase its originally indicated rate of consumption of HEU targets. Thus, unless the original license is modified, the applicant will be able to use HEU targets for at least a year beyond the date originally indicated to the Commission and delay conversion to LEU by a corresponding period of time. The letter to the Commission conveying the Executive Branch views, dated February 5, 2001, does not address this concern.

The applicant presents no sound argument why delaying the start-up of the Maple reactors should delay conversion to LEU targets. The applicant eventually needs to irradiate prototype LEU targets in its Maple reactors and process them in its New Processing Facility (NPF) as part of its LEU target development effort, as indicated in its response. But these steps never were planned to be carried out during the reactors' first year of operation. The immediate steps on the critical path to conversion are resolution of two technical issues stemming from the higher concentration of uranium in the process solution associated with LEU targets – extraction of molybdenum-99 and calcination of waste. Resolution of these technical issues during the next year or two does not require operation of the Maple reactors and NPF.[1] Accordingly, there is no reason that delaying the start-up of the Maple reactors and NPF should result in any delay in converting to LEU targets.

Given that isotope production with HEU targets will start a year later than anticipated, and will not delay conversion to LEU targets, the applicant will require one year's less worth of HEU targets. Accordingly, we urge the Commission both to approve the pending license (XSNM 03171) for 10.05 kilograms of HEU metal – representing one year's requirement in the NRU – and simultaneously to reduce the amount of HEU approved for export as targets in the existing license (XSNM 03060) by 22.6125 kilograms, representing one year's requirement in the Maple reactors.

Finally, we urge the Commission to determine whether the applicant in fact has been actively pursuing conversion to LEU targets as required by the Schumer Amendment as a condition for interim exports of HEU from the United States. It is our understanding that the applicant did little to address the two technical issues referenced above from the time they were identified in April 2000 until a meeting with U.S. officials in January 2001.[2] If the applicant is seeking an extension of its conversion deadline, it is thus a consequence of the applicant's own dilatory behavior rather than of delays in starting the Maple reactors. The Commission should not reward such foot-dragging by permitting the applicant to export HEU from the United States for an additional year. Such an outcome would undermine the letter and spirit of U.S. law and set a dangerous precedent which will be noticed by medical isotope producers worldwide.

Thank you for your consideration of our views.

Sincerely,

Alan Kuperman (ST)

Alan J. Kuperman
Senior Policy Analyst

Paul L. Leventhal
President

Cc: Senator Charles E. Schumer

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[1] Letter from Trisha Dedik, U.S. Department of Energy, to Richard J. K. Stratford, U.S. Department of State, January 24, 2001, states that "this part of the Conversion Plan could take as long as two years to complete."
[2] Ibid. The letter states that "steps were taken at last week's meeting to begin an active program of cooperation between AECL and Argonne in Phase II of the Conversion Plan." (Emphasis added.)